



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,061	02/15/2002	Shigang Chen	50325-0641	6345
29989	7590 11/02/2005	EXAMINER		
HICKMAN 2055 GATEW	PALERMO TRUONG	TRAN, ELLEN C		
SUITE 550	ATTEACE		ART UNIT	PAPER NUMBER
SAN JOSE, (CA 95110		2134	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.		Applicant(s)			
Office Action Summary			10/078,061		CHEN ET AL.			
		Examiner		Art Unit				
			Ellen C. Tran		2134			
Period fo	The MAILING DATE of this communi r Reply	ication appe	ears on the cover	sheet with the co	orrespondence ad	idress		
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR THE VER IS LONGER, FROM THE M. Issions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this common period for reply is specified above, the maximum state to reply within the set or extended period for reply eply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	AILING DA of 37 CFR 1.136 nunication. atutory period will will, by statute, c	TE OF THIS CO 6(a). In no event, howe Il apply and will expire a cause the application to	DMMUNICATION ever, may a reply be time SIX (6) MONTHS from the become ABANDONED	Bly filed the mailing date of this c (35 U.S.C. § 133).	•		
Status								
2a)								
Dispositi	on of Claims							
4) Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-28 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.								
Applicati	on Papers			•				
10)	The specification is objected to by the The drawing(s) filed on is/are: Applicant may not request that any objected to Replacement drawing sheet(s) including The oath or declaration is objected to	a)∭ accep ction to the dr the correctio	pted or b) obj rawing(s) be held on is required if the	in abeyance. See e drawing(s) is obje	37 CFR 1.85(a). ected to. See 37 C	, ,		
Priority (inder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
2) Notic 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (Pination Disclosure Statement(s) (PTO-1449 or Provious)		5) 🔲	Interview Summary (Paper No(s)/Mail Dat Notice of Informal Pa Other:	e	O-152)		

Application/Control Number: 10/078,061

Art Unit: 2134

DETAILED ACTION

Page 2

1. This action is responsive to communication: filed on 15 February 2002.

2. Claims 1-28 are currently pending in this application. Claims 1, 11, 17, 27, and 28 are independent claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language

4. Claims 1, 5-8, 10-13, 15-17, 21-24, and 26-28, are rejected under 35 U.S.C. 102(e) as being anticipated by Shah et al. U.S. Patent No. 6,678,835 (hereinafter '835).

As to independent claim 1, "A method for deploying configuration instructions to security devices in order to implement a security policy in a network, the method comprising the computer-implemented steps of:" is taught in '835 col. 1, line 60 through col. 2, line 32;

"detecting that implementing a security policy will cause an address translation alteration in a packet communicated between a management source and a plurality of security devices for implementing the security policy on the network" is shown in '835 col. 19, line 50 through col. 20, line 37;

"identifying, from among the plurality of security devices, one or more sets of security devices that have one or more configuration dependencies as a result of the address

Art Unit: 2134

translation alteration if the security policy is implemented" is disclosed in '835 col. 20. lines 37-49;

"and sending one or more configuration instructions from the management source to each of the one or more sets of security devices using an order that is determined based on the one or more configuration dependencies, resulting in implementing the security policy on the network" is taught in '835 col. 20, line 47 through col. 21, line 39.

As to dependent claim 5, "wherein: detecting that implementing the security policy will cause an address translation alteration between a management source and a plurality of security devices includes detecting that implementing the security policy will cause a natural address translation between the management source and one of the plurality of security devices" is disclosed in '835 col. 20, lines 37-49.

As to dependent claim 6, "wherein: detecting that implementing the security policy will cause an address translation alteration between a management source and a plurality of security devices includes detecting that implementing the security policy will cause a static address translation between the management source and one of the plurality of security devices" is shown in '835 col. 20, lines 37-49.

As to dependent claim 7, "wherein: detecting that implementing the security policy will cause an address translation alteration between a management source and a plurality of security devices includes detecting that implementing the security policy will cause a tunneling translation between the management source and one of the plurality of security devices" is disclosed in '835 col. 19, lines 51-61.

As to dependent claim 8, "wherein: detecting that implementing the security policy will cause an address translation alteration between a management source and a plurality of security devices includes detecting that implementing the security policy will cause a natural address translation; identifying one or more sets of security devices that would each have one or more configuration dependencies as a result of the address translation alteration includes identifying a first network path that interconnects the management source and a first set of the one or more security devices in series; and sending configuration instructions from the management source to one or more sets of security devices includes sending configuration instructions to at least some of the security devices on the first network sequentially, beginning with a first security device on the first network path that is ordered to be a last one of the security devices on the first network path to receive communications from the management source" is disclosed in '835 col. 20, lines 1-49.

As to dependent claim 10, "wherein: detecting that implementing the security policy will cause an address translation alteration between a management source and a plurality of security devices includes detecting that implementing the security policy will cause a tunneling translation on the first network path" is disclosed in '835 col. 19, lines 51-61;

"and identifying one or more sets of security devices that would each have one or more configuration dependencies as a result of the address translation alteration includes identifying s first network path that interconnects the management source and a first set of the one or more security devices in series; sending configuration instructions from the management source to one or more sets of security devices includes seeding configuration instructions to one or more security devices on the first network path using the order of cither

Art Unit: 2134

(i) sending configuration instructions to each security device of the first network path that is ordered in series between the management source and the static address translation before sending configuration instructions from the management source to any of the other security devices that are ordered in series after the static translation or (ii) sending configuration instructions to all of the other security devices that are ordered in series after the static translation before sending configuration instructions from the management source to each security device that is ordered between the management source and the tunneling translation" is disclosed in '835 col. 20, lines 1-49.

As to dependent claim 11, "A method for deploying configuration instructions to security devices in order to implement security policy in a network, the method comprising the computer-implemented steps of:" is taught in '835 col. 1, line 60 through col. 2, line 32;

"detecting that the security policy creates a change of one or more configuration

dependencies as compared with an existing security policy, each configuration dependency

corresponding to at least a first security device having to be configured before a second security

device is configured in order for the first security device to receive its configuration instructions

for implementing the security policy from a management source" is shown in '835 col. 19, line 50

through col. 20, line 49;

"and deploying configuration instructions to one or more security devices to implement the security policy according to an order determined by the one or more configuration dependencies" is disclosed in '835 col. 20, line 47 through col. 48, line 39.

As to dependent claim 12, "wherein deploying configuration instructions includes deploying, for a network path containing at least a first configuration dependency of the one or

Application/Control Number: 10/078,061

Art Unit: 2134

more configuration dependencies, configuration instructions to a first security device of the first configuration dependency before deploying configuration instructions to a second security device of the first configuration dependency, wherein the first security device has to be configured before the second security device in order for the first security device to receive its configuration instructions for implementing the security policy from the management source" is disclosed in '835 col. 20, lines 1-49.

As to dependent claim 13, "further comprising creating a schedule to implement the security policy to account for the change in the one or more configuration dependencies, and wherein deploying configuration instructions to one or more security devices includes using the schedule to deploy the configuration instructions" is taught in '835 col. 10, lines 52-60.

As to dependent claim 15, "wherein detecting that the security policy creates a change of one or more configuration dependencies from an existing security policy includes detecting the addition, deletion or modification of an address translation in a network path between the one or more security devices and the policy manager" is shown in '835 col. 20, lines 24-37.

As to dependent claim 16, "further comprising detecting the addition, deletion or modification of the address translation selected from an address translation type consisting of a natural address translation type, a reverse address translation type, and a tunnel translation" is shown in '835 col. 19, lines 51-61.

As to independent claim 17, this claim is directed to a computer-readable medium for implementing the method of claims 1 and 11; therefore it is rejected along similar rationale.

As to dependent claims 21, 22, 23, 24, and 26, these claims contain substantially similar subject matter as claims 5, 6, 7, 8, and 10; therefore they are rejected along similar rationale.

Application/Control Number: 10/078,061 Page 7

Art Unit: 2134

As to independent claim 27, this claim is directed to a computer system for implementing the method of claim 1, therefore it is rejected along similar rationale.

As to independent claim 28, this claim is directed to a management device for implementing the method of claim 1; therefore it is rejected along similar rationale.

Claim Rejections - 35 USC § 103

- 5 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6 Claims 2-4, 9, 14, 18-20, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over '835 in further view of Rothermel et al. U.S. Patent No. 6,678,827 (hereinafter '827).

As to dependent claim 2, the following is not taught in '835: "wherein sending configuration instructions from the management source to the one or more sets of security devices includes sending configuration instructions to multiple sets of security devices in parallel, wherein each of the multiple sets of security devices includes one or more configuration dependencies" however '827 teaches "For example the manager device can distribute the template to multiple NSDs, by sending a single copy of the template to a supervisor" in col. 3, lines 35-40.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of '835 a method of managing policies that allow the policy setting to be defined in an intuitive and extensible fashion to include means to distribute the policies in parallel. One of ordinary skill in the art would have been motivated to perform such a modification because as the size of the networks increase it is important to maintain consistency in policy distributed (see '827 col. 2 lines 52 et seq.) "When it is necessary to configure large numbers of NSDs, such problems are only exacerbated. If the security policies across some or all of the NSDs should be consistent (e.g., multiple devices in use by a single company), the likelihood of mistakes increases. If the system administrator merely copies the specific security policy from one NSD to another, mistakes may occur in re-specifying the various NSD-specific configuration information. Alternately, if the system administrator attempts to re-create the general security policy independently on each NSD, various mistakes may occur such as neglecting to configure a type of service or incorrectly configuring the actions for such a type".

As to dependent claim 3, "wherein: identifying one or more sets of security devices that would each have one or more configuration dependencies as a result of the address translation alteration includes identifying a first network path that, interconnects the management source and a first set of the one or more security devices in series, and a second network path that interconnects the management source and a second set of the one or more security devices in series; and sending configuration instructions to multiple sets of security devices in parallel includes sending configuration instructions to one or more security devices on the first network path and on the second network path concurrently, and independently of one another, using

Art Unit: 2134

the order determined by the one or more configuration dependencies" is disclosed in '835 col. 20, lines 1-49;

As to dependent claim 4, "wherein: identifying one or more sets of security devices that would each have one or more configuration dependencies as a result of the address translation alteration includes identifying a first network path that interconnects the management source and a first set of the one or more security devices in series, and a second network path that interconnects the management source and a second set of the one or more security devices in series" is shown in '835 col. 19, line 50 through col. 20, line 37;

"sending configuration instructions from the management source to each of the one or more sets of security devices includes sending configuration instructions to one or more security devices on the first network path and on the second network path in parallel" is disclosed in '827 col. 3, lines 35-40

"and sending configuration instructions to one or more security devices on the first network path includes sending configuration instructions to at least some of the security devices on the first network path sequentially, beginning with a first security device on the first network path that is ordered to be a last one of the security devices on the first network path to receive communications from the management source" is taught in '835 col. 20, line 47 through col. 21, line 39.

As to dependent claim 9, "wherein: detecting that implementing the security policy will cause an address translation alteration between a management source and a plurality of security devices includes detecting that implementing the security policy will cause a static address translation on the first network path; and identifying one or more sets of security devices that Application/Control Number: 10/078,061

Art Unit: 2134

would each have one or more configuration dependencies as a result of the address translation alteration includes identifying a first network path that interconnects the management source and a first set of the one or more security devices in series; sending configuration instructions from the management source to one or more sets of security devices includes sending configuration instructions to one or more security devices on the first network path using the order of either (i) sending configuration instructions to each security device of the first network path that is ordered in series between the management source and the static address translation before sending configuration instructions from the management source to any of the other security devices that are ordered in series after the static address translation" is disclosed in '835 col. 20, lines 37-49;

Page 10

"or (ii) sending configuration instructions to all of the other security devices that are ordered in series after the static address translation before sending configuration instructions from the management source to each security device that is ordered between the management source and the static address translation" is shown in '827 col. 5, lines 2-13 "the manager device can distribute the template to multiple NSDs by sending a single copy of the template to a supervisor device associated with the NSDs and by then having the supervisor device update each of the NSDs with a copy of the template. Each of the NSD template copies can then be configured with NSD-specific information from one or more of a variety of sources, such as by the manager device, by a local user such as a system administrator, or automatically such as with DNS information. In particular, aliases in the template copy on a particular NSD can be replaced with information about the specific corresponding devices that are protected by the NSD, and NSD-specific access information can also be specified. For example, an alias for

an HTTP server can be replaced with the specific network address and name of the actual HTTP server".

As to dependent claim 14, "wherein deploying configuration instructions induces deploying in parallel the configuration instructions to each of the first security devices in the one or more configuration dependencies" is taught in '827 col. 3, lines 35-40.

As to dependent claim 18, "wherein instructions for sending one or more configuration instructions from the management source to each of the one or more sets of security devices include instructions for sending configuration instructions to multiple sets of security devices in parallel, wherein each of the multiple sets of security devices includes one or more configuration dependencies" is taught in '827 col. 3, lines 35-40.

As to dependent claim 19, "wherein: instructions for identifying one or more sets of security devices that would each have one or more configuration dependencies as a result of the address translation alteration include instructions for identifying a first network path that interconnects the management source and a first set of the one or more security devices in series, and a second network path that interconnects the management source and a second set of the one or more security devices in series" is disclosed in '835 col. 20, lines 37-49;

"and instructions for sending one or more configuration instructions to multiple sets of security devices in parallel include instructions for sending configuration instructions to one or more security devices on the first network path and on the second network path concurrently, and independently of one another" is disclosed in '827 col. 3, lines 35-40.

As to dependent claim 20, "wherein: instructions for identifying one or more sets of security devices that would each have one or more configuration dependencies as a result Application/Control Number: 10/078,061 Page 12

Art Unit: 2134

of the address translation alteration include instructions for identifying a first network path that interconnects the management source and a first set of the one or more security devices in series, and a second network path that interconnects the management source and a second set of the one or more security devices in series" is disclosed in '835 col. 20, lines 37-49;

"instructions for sending one or more configuration instructions from the management source to each of the one or more sets of security devices 1 include sending configuration instructions to one or more security devices on the first network path and on the second network path in parallel" is disclosed in '827 col. 3, lines 35-40;

"including for sending configuration instructions to atleast some of the security devices on the first network path sequentially, beginning with a first security device on the first network path that is ordered to be a last one of the security devices on the first network path to receive communications from the management source" is taught in '835 col. 20, line 47 through col. 21, line 39.

As to dependent claim 25, this claim contains substantially similar subject matter as claim 9; therefore they are rejected along similar rationale.

Conclusion

Application/Control Number: 10/078,061 Page 13

Art Unit: 2134

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ellen C Tran whose telephone number is

(571) 272-3842. The examiner can normally be reached from 6:30 am to 3:30 pm.

organization where this application or proceeding is assigned is (571) 273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (571) 272-3838. The fax phone number for the

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ellen Tran
Patent Examiner
Technology Center 2134
27 October 2005

GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Dy O Ma